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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,803	01/14/2005	Robert Lange	Q83451	6807

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EXAMINER

CUMBERLEDGE, JERRY L

ART UNIT PAPER NUMBER

3733

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/506,803

Applicant(s)

LANGE, ROBERT

Examiner

Jerry Cumberledge

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13-21 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by McMillan (US Pat. 5,556,687).

McMillan discloses a longitudinal implant and connecting device wherein said longitudinal implant is fastenable to bones on either side of a damaged area through said connecting device, said implant and connecting device comprising: a longitudinal implant (Fig. 3, ref. 10) made of a filament or fiber composite material (column 4 lines 43-53), wherein filaments or fibers in said material are oriented (column 7, lines 65-67 and column 8, lines 1-2) to resist biomechanical forces (column 8, lines 1-2), and a connecting device (Fig. 2, ref. 20) made of a material harder than said longitudinal implant (column 3, lines 32-35), wherein, said connecting device is operative to squeeze and lock the longitudinal implant into position both by depression caused by a squeezing and increased friction between the harder material of the connecting device and the composite material of the longitudinal implant, and wherein the implant is one of an elongated structure (Fig. 1), the structure having a longitudinal slot (Fig. 1 ref. 40) extending along a substantial portion of its length and wherein filaments or fibers are aligned lengthwise (column 7, lines 65-67 and column 8, lines 1-2), so that compression

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will not change their strength characteristics to any extent even when compressed. The longitudinal implant is made of a carbon filament composite material (column 4, lines 28-29) (column 4, lines 56-58). The filaments are encapsulated in a polymer matrix (column 4, lines 56-58). The filaments are encapsulated in PEEK or PEKEKK (column 4, lines 62-67). The connecting device comprising a pedicle screw (Fig. 2 ref 20) having an upper section (Fig. 2, ref. 32) having a width greater than the width of said slot and an exteriorly threaded portion (Fig. 2, ref. 26)(column 3, lines 37-39) extending outwardly from said section (Fig. 2) and extending through said slot (Fig. 2).

An interiorly threaded nut (Fig. 2 ref. 28) (column 3, lines 37-39) is received by an outer end of said threaded portion (Fig. 2) whereby said plate can be grasped between said upper section and said nut to tightly secure said plate by threading said upper section. The connecting device comprises a screw (Fig. 2, ref. 20) and a nut (Fig. 2 ref. 28), each of which is made of titanium (column 3, lines 32-35). The implant is a rail having a rectangular cross section (Fig. 4). The definition of rail, according to the Merriam-Webster Online Dictionary is "a bar extending from one post or support to another and serving as a guard or barrier". The plate (Fig. 3, ref. 10) can be considered to be a bar, which extends between two posts, the posts being the two fasteners (Fig. 2, ref. 20) (Fig. 1). The implant is a plate (Fig. 3, ref. 10). The filaments are woven (Fig. 6, ref. 102) (column 4, lines 37-42).

With regard to statements of intended use and other functional statements (e.g. "...to resist biomechanical forces..." "...operative to squeeze and lock the longitudinal implant..." "...so that compression will not change their strength characteristics..."), they

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do not impose any structural limitations on the claims distinguishable over the device of McMillan, which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Furthermore, the law of anticipation does not require that the reference "teach" what the subject patent teaches, but rather it is only necessary that the claims under attack "read on" something in the reference. *Kalman v. Kimberly Clark Corp.*, 218 USPQ 781 (CCPA 1983). Furthermore, the manner in which a device is intended to be employed does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMillan (US Pat. 5,556,687) in view of Törmälä et al. (US Pat. 5,084,051).

McMillan discloses the claimed invention except for the implant being a rod.

Törmälä et al. disclose an implant in the shape of a rod (Fig. 8) (column 11, lines 47-51) comprising a fiber reinforced composite material (column 11, lines 52-54), which can be used as fixation devices in the treatment of cancellous bone fractures, osteotomies and arthrodesis (column 11, lines 47-51).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have constructed the longitudinal implant of McMillan as a rod of Törmälä et al., in order to use the implant in the treatment of cancellous bone fractures, osteotomies and arthrodesis (Törmälä et al., column 11, lines 47-51).

Response to Arguments

Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Cumberledge whose telephone number is (571) 272-2289. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLC



EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER